NONLINEAR EDGE-ENHANCEMENT FILTER

ABSTRACT OF THE DISCLOSURE

5   Methods and apparatus for digital data array edge enhancement are disclosed. A local data window containing a data sample s is selected. Minimum and maximum sample values, *max* and *min*, are located within the window, and an edge deflection value *ed* is defined to have a value between *max* and *min*. A diffusion quantity is then calculated to move the value of s towards *max*, if s is greater than *ed*, or towards *min*, if s is smaller than *ed*. This

10   approach has advantages over gradient-based edge-enhancement, including simplicity, convergence speed, and stability.